

California 2000 AIDS Knowledge, Attitudes, Beliefs and Behaviors

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Introduction

Effective prevention programs require behavioral surveillance and cultural competency. Behavioral surveillance monitors preventive and risky behaviors in a community. Behavioral surveillance information can be used to identify at-risk populations and develop targeted prevention programs with appropriate prevention messages. “Timely and accurate information related to the behavioral...indicators of HIV transmission and prevention is necessary to develop rational and targeted prevention plans.” (1) Furthermore, behavioral surveillance data can be used to indicate the epidemic’s severity where HIV infection is not reportable and help explain trends in the epidemic in areas where HIV infection is reportable.

Cultural competency applies the understanding of and knowledge about a particular culture to design prevention programs and consequently maximize the effectiveness of prevention efforts. Operationally, cultural competency is defined as the “integration and transformation of knowledge about individuals and groups of people into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of health care; thereby producing better health outcomes.” (2) To successfully promote behavioral change, it is critical to understand the sociocultural system in which the change is implemented and the manner in which it is introduced. “The responses of a given sociocultural system to the introduction of new elements are explained not only by the nature of the system nor alone by the nature and mode of introduction of new elements but by the complex interaction of both.” (3) The sociocultural forces help to shape individual perceptions, attitudes, and cognitive processes which may influence behavioral change. Organizations can use their understanding of these forces and of the community’s HIV-related attitudes, knowledge, and beliefs to develop and implement prevention programs that are culturally competent.

In implementing effective prevention programs, California faces the complexity of a large and diverse population. California’s population (approximately 33.8 million) accounts for roughly 12 percent of the US population. (4,5) Between 1990 and 2000, this state’s population has increased 13.8 percent. (6) Behavioral surveillance of such a large population is exceptionally difficult. Furthermore, California’s diverse population makes it difficult to implement culturally competent prevention programs. Not only is the population racially and ethnically diverse, being 32.4 percent Hispanic, 10.8 percent Asian, and 6.4 percent African American, it is well represented with first-generation immigrants. (6) In 1997 and 1998 California’s legal immigrants accounted for as much

as 25 percent of all legal immigrants entering the U.S. in those years. (7) Varied levels of assimilation pose challenges to understanding communities. Cultures as a whole, and generations within these cultures, may assimilate more easily into western culture. Among immigrants, the younger generation may be more likely to adopt new behaviors and learn about HIV than older generations. Language is an important component of assimilation, but it poses a barrier for effective prevention programs in California. Of the 8,619,334 Californians who spoke a language other than English at home in 1990, 51.3 percent did not speak English “very well.” (8) Understanding health beliefs, attitudes, HIV-related knowledge and risk behaviors of this population is challenging.

The California 2000 AIDS Knowledge, Attitudes, Beliefs, and Behaviors (KABB) statewide study was implemented to assess HIV/AIDS risk behaviors, knowledge, attitudes, and beliefs of California’s adult residents. These data are critical for development of culturally appropriate and timely HIV/AIDS prevention programs.

Methods

The University of California, Berkeley Center for Family and Community Health (CFCH) conducted the KABB study for the California Department of Health Services. The KABB study consisted of a statewide telephone survey administered to 1,739 individuals between April and June of 2000. The survey collected demographic information and asked questions about 1) HIV risk behaviors, 2) knowledge, beliefs and attitudes regarding HIV/AIDS, 3) personal experience with HIV testing, and 4) opinions regarding public policy.

A random sampling of telephone numbers in California, stratified by region was performed to ensure that the survey results could be generalized to the greater population. Both urban and rural regions were included. Supervised by CFCH, the Communication Sciences Group/ Survey Methods Group conducted the survey using computer-assisted telephone interviewing (CATI) system. All residential households with an individual over the age of 18 were eligible. Interviews were conducted in either English or Spanish, depending on the preference of the study participant. Up to 40 attempts were made to each selected telephone number. In households where someone answered the telephone, a respondent was randomly selected. In 68.5 percent of these households, the selected respondent completed the interview. A conservative estimate of the response rate (based upon all households sampled) was 35.4 percent. Each respondent was asked approximately 70 questions. Completed interviews lasted an average of 22 minutes.

Data collected from the interviews went through two phases of weighting for analysis. Sample weights were developed to account for different probabilities of selection of a household into the sample. This weighting was performed based on the number of phone lines in a household and the number of eligible adults in the household. Post-stratification weights were then applied to account for the age, gender, and race/ethnic distribution of California’s population. California’s demographic distribution was obtained from the California Department of Finance projections for

2000. The demographic distribution of the sample was weighted to reflect the distribution estimates for California. Thus far, only simple analyses have been conducted with these survey data, but further in-depth analyses are planned. Some of the results of the simple analyses are presented.

Results

The following results are presented as percentages of Californians. The survey data was weighted so that the age, gender, and race/ethnic distribution of the sample would match that of California's population and so that each household had an equal probability of selection. In this way, data collected from the randomized survey would be representative of California's adult population.

HIV Risk Behaviors

HIV risk was assessed through various behavioral definitions. HIV risk behavior was defined as injection drug use, sex with someone in a high-risk group¹, or sex with at least six partners in the past 12 months. A composite measure for HIV risk was constructed based upon whether a respondent reported any of these behaviors within the past 12 months.

Results from several risk behavior questions are presented in Table 1. Approximately 2.4 percent of California's adults engaged in at least one of the above-mentioned risk behaviors within the past 12 months (95% confidence interval [CI]: 1.5, 3.2). About 8.3 percent had two to five sex partners in the past year (CI: 6.8, 9.8) while the majority (70.1%, CI: 67.6, 72.7) had one sex partner in the past year.

The questionnaire also assessed lifetime injection drug use and number of high-risk casual sex² partners. Approximately 3.9 percent of adults in California have used injection drugs in their lifetime (CI: 2.8, 5.1). Roughly 1 percent of adults have had more than three high-risk casual sex partners in their lifetime (CI: 0.6, 1.7) while the majority (97.1%) have not engaged in casual sex with a high-risk individual in their lifetime (CI: 96.2, 97.9).

Self-perceived risk for HIV infection is another common way to assess risk. Respondents were asked to assess their own risk for HIV infection. Approximately half (50.8%) of California adults did not perceive themselves to be at risk for HIV (CI: 47.9, 53.7). Roughly 37 percent (CI: 34.5, 40.0) felt that their chances of getting infected with HIV is low, while only 12 percent believed that their risk is medium or high (9.4% [CI: 7.7, 11.1] and 2.6 percent [CI: 1.7, 3.4], respectively).

¹ High-risk partner was defined as "men who have sex with men, injection drug user, and/or HIV-infected person."

² Casual sex was defined as "any sex that is not part of a long-term or committed relationship."

Knowledge, Attitudes, and Beliefs

This section explores self-perceived knowledge about HIV prevention, concern about the epidemic, beliefs about who is at risk, knowledge about how HIV can be transmitted and prevented, and comfort around individuals with HIV. The majority of adults indicated that they felt well informed about ways to prevent getting infected with HIV (80.5%, CI: 78.1, 82.8). Even though 92.5 percent of the population knew that an HIV-infected pregnant woman can infect her unborn child (CI: 90.9, 94.1), only 24.2 percent knew that there are medicines to help prevent this transmission (CI: 21.8, 26.6).

Results for several HIV/AIDS knowledge items are presented in Figure 1. Approximately 80 percent of the state's adult population knew that infected individuals may look and feel fine and may not know that they are capable of spreading the disease (83.0%, CI: 80.7, 85.4). Over three quarters of those surveyed knew that the statement "AIDS is a gay man's disease" was incorrect (77.0%, CI: 74.3, 79.7). Only 43.6 percent of the population, however, knew that most AIDS patients in Africa are heterosexual (CI: 43.2, 52.0).

Personal Experience with HIV Testing

This section explores experience with HIV antibody testing. Survey participants were asked whether they had ever been tested for HIV antibodies, for what reason, at what type of facility they had their last test, and whether they had received the test results and any counseling with these results. Approximately one-half (50.5%, CI: 47.5, 53.4) of adults indicated that they had been tested in their lifetime. Among those who had been tested, the top three reasons given for getting their last test were: 1) routine check-up (18.2%, CI: 15.3, 21.0), 2), because of pregnancy (14.5%, CI: 11.8, 17.2), and 3) just to find out/curiosity (14.1%, CI: 11.1, 17.0).

Opinions Regarding Public Policies

Respondents were asked several questions to ascertain their opinions regarding certain public policy issues. Of particular interest are those opinions regarding HIV reporting. Without HIV reporting, it is difficult to accurately assess current trends in the epidemic and identify which populations should be targeted for HIV education, prevention and care efforts. Furthermore, lack of this data will potentially reduce future federal funding for HIV/AIDS Care programs in the State. Beginning in 2005, federal Comprehensive AIDS Resources Emergency Act funding will be distributed according to the number of HIV and AIDS cases reported in the state. California is in the process of developing regulations for a system of HIV reporting using a non-name code. Therefore, examination of public opinion regarding reporting is especially valuable.

According to the 2000 KABB survey, two out of three (67%) Californian adults believed that HIV-positive cases should be reported using a unique identifier (CI: 64.5, 69.7). As is illustrated in Figure 2, another 15 percent also felt that cases should be reported, but that the reporting should be done using a name system (CI: 13.2, 17.2).

Among those who felt that HIV-positive cases should not be reported (12%, CI: 10.4, 13.8), the top reason given for this opinion is that a person's "HIV status is a private medical matter" (57.0%, CI: 49.7, 64.2). Some other reasons given were that "reporting HIV status promotes prejudice/discrimination" (13.3%, CI: 8.0, 18.7) and "don't trust the health department with information" (7.9%, CI: 3.8, 11.9).

Future Directions

Assessment and continual monitoring of risk behavior is critical for controlling the HIV/AIDS epidemic. Data collected in a timely fashion is needed for planning, initiating, supporting and evaluating health promotion and disease prevention programs. (9) Furthermore, assessment of knowledge, attitudes, and beliefs with regard to HIV/AIDS and investigation into how these factors interplay with behavior will provide insight into how prevention programs should target high-risk populations. The California 2000 KABB survey was conducted to collect such information. Not only can it be useful for the development and implementation of HIV prevention programs, it can provide policy makers with the opinions of Californians on HIV-related issues.

A comprehensive report of the survey, prepared by researchers at CFCH is forthcoming. This report will provide details on the methods used, including sampling and weighting procedures. For most items on the survey, the report includes a breakdown of results by demographic characteristics as well as the statistical significance of these bivariate comparisons. The Office of AIDS, in collaboration with CFCH, will conduct further in-depth analyses of the 2000 KABB survey data. The authors hope to disseminate the results of these analyses to prevention planners, policy makers and to the general public in order to increase awareness and develop effective prevention strategies to combat the HIV/AIDS epidemic in California.

Citations

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Table 1: HIV Risk Behavior

	Percentage (95% Confidence Intervals)			
Injection Drug Use (lifetime) (N=1735) ¹	<u>Yes</u> 3.9% (2.8, 5.1)		<u>No</u> 96.1% (94.9, 97.2)	
Number of High-Risk** Casual³ Sex Partners (lifetime) (N=1709) ¹	<u>0</u> 97.1% (96.2, 97.9)	<u>1</u> 1.0% (0.5, 1.4)	<u>2</u> 0.8% (0.3, 1.3)	<u>≥3</u> 1.1% (0.6, 1.7)
Number of Sex Partners (12 months) (N=1721) ¹	<u>0</u> 20.7% (18.5, 22.9)	<u>1</u> 70.1% (67.6, 72.7)	<u>2-5</u> 8.3% (6.8, 9.8)	<u>≥6</u> 0.9% (0.4, 1.3)
Composite High-Risk Score⁴ (12 months) (N=1721) ¹	<u>No Risk Behavior</u> 97.6% (96.8, 98.5)		<u>At Least One Risk Behavior</u> 2.4% (1.5, 3.2)	

¹ May not equal total sample size because “don’t know/not sure” and “refused” responses have been excluded.

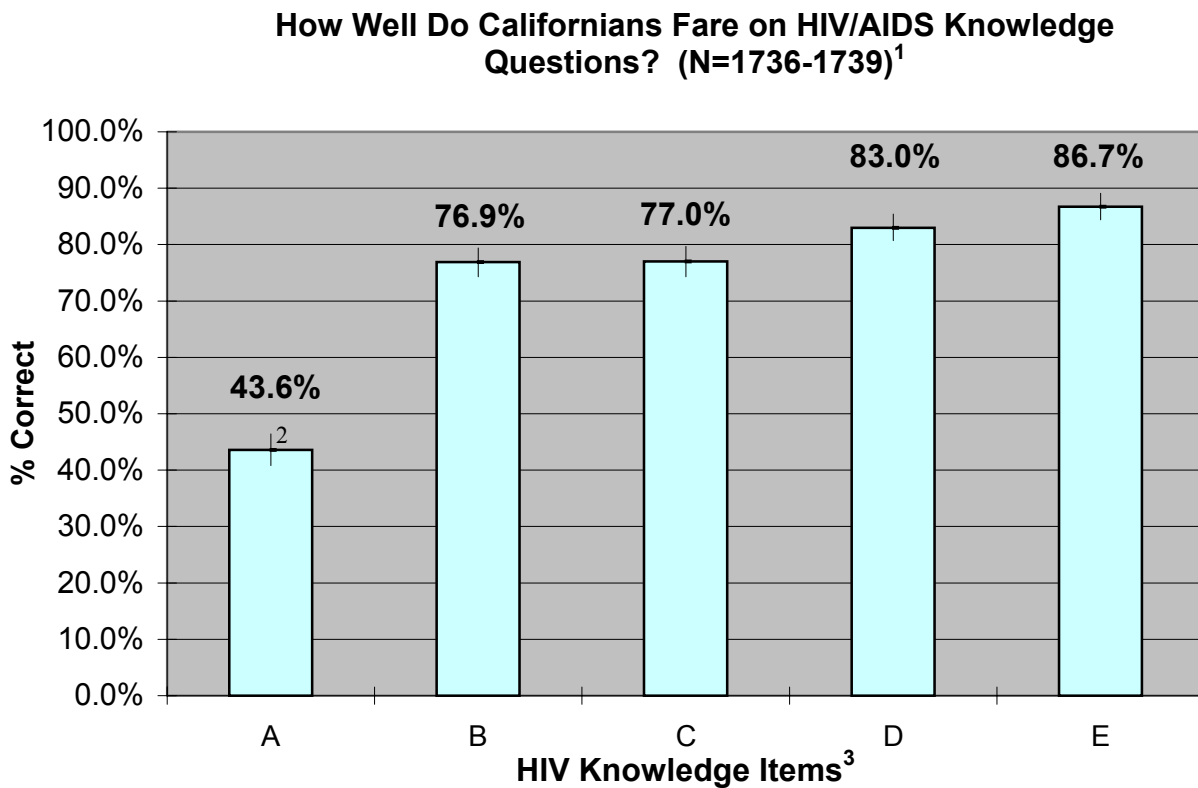
² High-risk partner was defined as “MSM, injection drug user, and/or HIV-infected.”

³ Casual sex was defined as “any sex that is not part of a long-term or committed relationship.”

⁴ Includes, in the past 12 months, any injection drug use, casual sex with high-risk group, sex with 6 or more partners.

(2000 KABB survey, Office of AIDS & University California - Berkeley)

Figure 1: HIV/AIDS Knowledge Items



- A In Africa, most AIDS patients are heterosexual.
- B Women are at very low risk of getting HIV, the virus that causes AIDS.
- C AIDS is a gay man's disease.
- D Infected individuals may look and feel fine and may not know that they are capable of spreading the disease.
- E People who are HIV positive are easy to pick out of a crowd even if they have not developed AIDS.

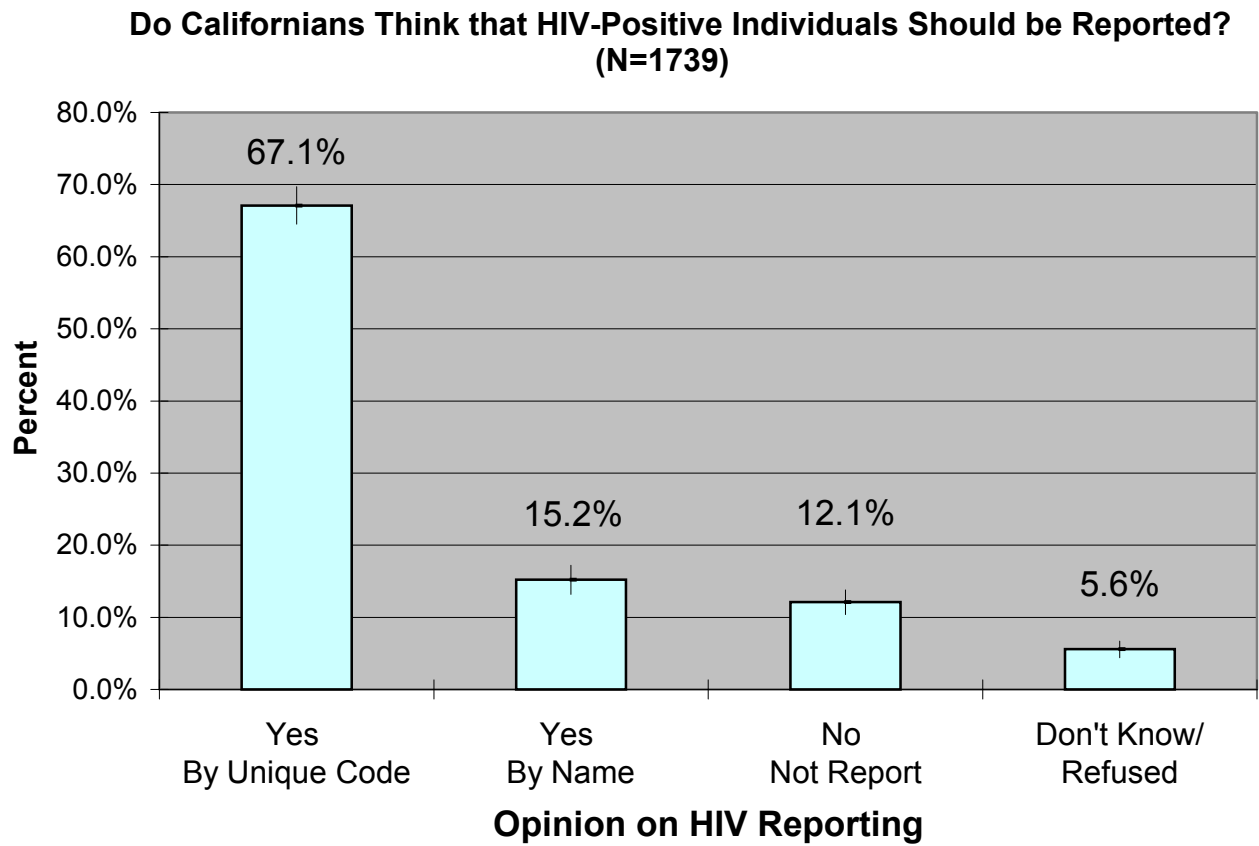
¹ Varied by knowledge item. May not equal total sample size because "refused" responses have been excluded.

² | at the top of each bar indicates the 95% Confidence Interval

³ Affirmative responses to items A and D were coded as correct. Affirmative responses to the other items were coded as incorrect.

(2000 KABB survey, Office of AIDS & University California - Berkeley)

Figure 2: Public Opinion on HIV Reporting



Note: | at the top of each bar indicates the 95% Confidence Interval

(2000 KABB survey, Office of AIDS & University California - Berkeley)